

First half of the exercise:

```
PS C:\WINDOWS\system32> docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
docker/getting-started latest          083d7564d904   15 minutes ago 28MB

PS C:\WINDOWS\system32> docker search ubuntu
NAME                DESCRIPTION                                     STARS     OFFICIAL   AUTOMATED
ubuntu              Ubuntu is a Debian-based Linux operating sys... 12367     [OK]
dorowu/ubuntu-desktop-lxde-vnc Docker image to provide HTML5 VNC interface ... 539
websphere-liberty   WebSphere liberty multi-architecture images ... 273     [OK]
rastasheep/ubuntu-sshd Dockerized SSH service, built on top of offi... 253     [OK]
consol/ubuntu-xfce-vnc Ubuntu container with "headless" VNC session... 241     [OK]
ubuntu-upstart      Upstart is an event-based replacement for th... 110     [OK]
landlinternet/ubuntu-16-nginx-php-phpmyadmin-mysql-5 ubuntu-16-nginx-php-phpmyadmin-mysql-5       50
open-liberty        Open Liberty multi-architecture images based... 46     [OK]
ubuntu-debootstrap  debootstrap --variant=minbase --components=m... 44     [OK]
i386/ubuntu         Ubuntu is a Debian-based Linux operating sys... 25
landlinternet/ubuntu-16-apache-php-5.6         ubuntu-16-apache-php-5.6                     14     [OK]
landlinternet/ubuntu-16-apache-php-7.0         ubuntu-16-apache-php-7.0                     13     [OK]
landlinternet/ubuntu-16-nginx-php-phpmyadmin-mariadb-10 ubuntu-16-nginx-php-phpmyadmin-mariadb-10     11     [OK]
landlinternet/ubuntu-16-nginx-php-5.6-wordpress-4 ubuntu-16-nginx-php-5.6-wordpress-4          9     [OK]
landlinternet/ubuntu-16-nginx-php-5.6         ubuntu-16-nginx-php-5.6                     8     [OK]
landlinternet/ubuntu-16-apache-php-7.1         ubuntu-16-apache-php-7.1                     7     [OK]
landlinternet/ubuntu-16-nginx-php-7.0         ubuntu-16-nginx-php-7.0                     4     [OK]
pivotaldata/ubuntu A quick freshening-up of the base Ubuntu doc... 4
landlinternet/ubuntu-16-nginx-php-7.1-wordpress-4 ubuntu-16-nginx-php-7.1-wordpress-4          3     [OK]
pivotaldata/ubuntu16.04-build Ubuntu 16.04 image for GPDB compilation        2
smarterentry/ubuntu ubuntu with smarterentry                      1     [OK]
landlinternet/ubuntu-16-php-7.1                ubuntu-16-php-7.1                          1     [OK]
pivotaldata/ubuntu-gpdb-dev                    Ubuntu images for GPDB development           1
landlinternet/ubuntu-16-sshd                   ubuntu-16-sshd                             1     [OK]
pivotaldata/ubuntu16.04-test                   Ubuntu 16.04 image for GPDB testing           0

PS C:\WINDOWS\system32> docker pull ubuntu:16.04
16.04: Pulling from library/ubuntu
80bce60046fa: Pull complete
55a738a15540: Pull complete
e19cf0706c62: Pull complete
de4cdd6c27d1: Pull complete
Digest: sha256:9775877f420d453ef790e6832d77630a49b32a92b7bedf330adf4d8669f6600e
Status: Downloaded newer image for ubuntu:16.04
docker.io/library/ubuntu:16.04

PS C:\WINDOWS\system32> docker pull ubuntu:16.10
16.10: Pulling from library/ubuntu
dca7be20e546: Pull complete
40bca54f5968: Pull complete
61464f23390e: Pull complete
d99f0bcd5dc8: Pull complete
120db6f90955: Pull complete
Digest: sha256:8dc9652808dc091400d7d5983949043a9f9c7132b15c14814275d25f94bca18a
Status: Downloaded newer image for ubuntu:16.10
docker.io/library/ubuntu:16.10

PS C:\WINDOWS\system32> docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
docker/getting-started latest          083d7564d904   About an hour ago 28MB
ubuntu              16.04          9ff95a467e45   3 weeks ago     135MB
ubuntu              16.10          7d3f705d307c   3 years ago     107MB

PS C:\WINDOWS\system32> docker rmi 7d3f705d307c
Untagged: ubuntu:16.10
Untagged: ubuntu@sha256:8dc9652808dc091400d7d5983949043a9f9c7132b15c14814275d25f94bca18a
Deleted: sha256:7d3f705d307c7c225398e04d4c4f8512f64eb8a65959a1fb4514dfde18a047e7
Deleted: sha256:d9db289b9342d9617596cd6ee3bba988629e24d9afa5db4e4b0e4e491c65007d
Deleted: sha256:a87725e8597b07f2399bc3aa50b0e2e0c903b8ce19055668d3befb012918205c
Deleted: sha256:38cf10a2801529348366953e9b933d3524360dedc91d3e4d5d7f941da0c973c9
Deleted: sha256:61172966249d43026dbd017eec3a9575e37bddf8a269a9f09ecb559d7bfe7fef
Deleted: sha256:57145c01eb80040fdd0a24cde20af4788605b49593188d4f7efab999af89a08e

PS C:\WINDOWS\system32> docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
docker/getting-started latest          083d7564d904   About an hour ago 28MB
ubuntu              16.04          9ff95a467e45   3 weeks ago     135MB
```

Second half of the exercise:

```
Administrator: Windows PowerShell

PS C:\WINDOWS\system32> docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
fd3ad72e4d2   docker/getting-started   "/docker-entrypoint..."   About an hour ago   Up About an hour   0.0.0.0:80->80/tcp, :::80->80/tcp   nice_chaplygin
PS C:\WINDOWS\system32> docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
3357894aca23   ubuntu:16.04   "/bin/echo 'Hello wo..."   3 minutes ago     Exited (0) 3 minutes ago           0.0.0.0:80->80/tcp, :::80->80/tcp   cranky_cori
fd3ad72e4d2   docker/getting-started   "/docker-entrypoint..."   About an hour ago   Up About an hour   0.0.0.0:80->80/tcp, :::80->80/tcp   nice_chaplygin
PS C:\WINDOWS\system32> docker run ubuntu:16.04 /bin/bash
PS C:\WINDOWS\system32> docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
88587880539   ubuntu:16.04   "/bin/bash"               18 seconds ago    Exited (0) 8 seconds ago           0.0.0.0:80->80/tcp, :::80->80/tcp   trusting_easy
3357894aca23   ubuntu:16.04   "/bin/echo 'Hello wo..."   4 minutes ago     Exited (0) 4 minutes ago           0.0.0.0:80->80/tcp, :::80->80/tcp   cranky_cori
fd3ad72e4d2   docker/getting-started   "/docker-entrypoint..."   About an hour ago   Up About an hour   0.0.0.0:80->80/tcp, :::80->80/tcp   nice_chaplygin
PS C:\WINDOWS\system32> docker run -i ubuntu:16.04 /bin/bash
root@aefec7347d94:/# pwd
/
root@aefec7347d94:/# is
root@aefec7347d94:/# exit
exit
PS C:\WINDOWS\system32> docker run -d ubuntu:16.04 /bin/sleep/3600
849452040e51ada3556645c5ec3ee5eN5d5873ccf8acdc5ffc8b115f10
Error: Error response from daemon: OCI runtime create failed: container_linux.go:300: starting container process caused: exec: "/bin/sleep/3600": stat "/bin/sleep/3600": not a directory; unknown: Are you trying to mount a directory onto a file (or vice-versa)? Check if th
PS C:\WINDOWS\system32> docker run -d ubuntu:16.04 /bin/sleep/3600
691386b37232e707b05aa1451d163c92d7aee0cc35b27679510872a348f4
PS C:\WINDOWS\system32> docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
691386b37232   ubuntu:16.04   "/bin/sleep/3600"         8 seconds ago   Up 6 seconds   0.0.0.0:80->80/tcp, :::80->80/tcp   gallant_mash
fd3ad72e4d2   docker/getting-started   "/docker-entrypoint..."   About an hour ago   Up About an hour   0.0.0.0:80->80/tcp, :::80->80/tcp   nice_chaplygin
PS C:\WINDOWS\system32> docker exec -i be7 /bin/bash
Error: No such container: be7
PS C:\WINDOWS\system32> docker exec -i 691 /bin/bash
root@691386b37232:/# ps aux
USER      PID %CPU %MEM    VSZ   stat  START   TIME COMMAND
root         1  0.0  0.0  4372   Ss   09:08   0:00 /bin/sleep 3600
root        17  0.0  0.0  18232 3384 pts/0   Ss   09:12   0:00 /bin/bash
root       18  0.0  0.0  34420 2868 pts/0   R+   09:12   0:00 ps aux
root@691386b37232:/# exit
exit
PS C:\WINDOWS\system32> docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
691386b37232   ubuntu:16.04   "/bin/sleep/3600"         5 minutes ago   Up 5 minutes   0.0.0.0:80->80/tcp, :::80->80/tcp   gallant_mash
fd3ad72e4d2   docker/getting-started   "/docker-entrypoint..."   About an hour ago   Up About an hour   0.0.0.0:80->80/tcp, :::80->80/tcp   nice_chaplygin
PS C:\WINDOWS\system32> docker stop 691
691
PS C:\WINDOWS\system32> docker ps -a
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
691386b37232   ubuntu:16.04   "/bin/sleep/3600"         6 minutes ago   Exited (137) 14 seconds ago           0.0.0.0:80->80/tcp, :::80->80/tcp   gallant_mash
849452040e51   ubuntu:16.04   "/bin/sleep/3600"         6 minutes ago   Created                                     dazzling_hawking
aefec7347d94   ubuntu:16.04   "/bin/bash"               8 minutes ago   Exited (0) 7 minutes ago           boring_fernobova
88587880539   ubuntu:16.04   "/bin/bash"               9 minutes ago   Exited (0) 9 minutes ago           trusting_easy
3357894aca23   ubuntu:16.04   "/bin/echo 'Hello wo..." 13 minutes ago   Exited (0) 13 minutes ago           cranky_cori
fd3ad72e4d2   docker/getting-started   "/docker-entrypoint..."   About an hour ago   Up About an hour   0.0.0.0:80->80/tcp, :::80->80/tcp   nice_chaplygin
PS C:\WINDOWS\system32> docker rm 691
691
PS C:\WINDOWS\system32> docker rm $(docker ps -a -q)
849452040e5
aefec7347d94
88587880539
3357894aca23
Error: response from daemon: You cannot remove a running container fd3ad72e4d20b6f67456d083ef0b6250f307c879e4c908c37Feb05037. Stop the container before attempting removal or force remove
PS C:\WINDOWS\system32> docker ps
CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
fd3ad72e4d2   docker/getting-started   "/docker-entrypoint..."   About an hour ago   Up About an hour   0.0.0.0:80->80/tcp, :::80->80/tcp   nice_chaplygin
PS C:\WINDOWS\system32> docker stop fd3
fd3
PS C:\WINDOWS\system32> docker rm $(docker ps -a -q)
fd3ad72e4d2
PS C:\WINDOWS\system32> docker run --rm ubuntu:16.04 /bin/echo 'Hello and Goodbye!'
Hello and Goodbye!
```